

Update of Search 8/6/4 JH (13 pp.)

| L. Number | Hits | Search Text  | DB  | Time stamp       |
|-----------|------|--|---|------------------|
| 1         | 676  | 257/499  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2004/08/06 16:05 |
| 2         | 79   | 257/504  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2004/08/06 16:05 |
| 3         | 1511 | 257/506  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2004/08/06 16:05 |
| 4         | 1093 | 257/510  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2004/08/06 16:06 |
| 5         | 437  | 257/517  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2004/08/06 16:06 |
| 6         | 434  | 257/520  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2004/08/06 16:06 |
| 7         | 292  | 257/509  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2004/08/06 16:06 |
| 8         | 487  | 257/513  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2004/08/06 16:06 |
| 9         | 1105 | 257/329  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2004/08/06 16:07 |
| 10        | 1620 | 257/330  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2004/08/06 16:07 |
| 11        | 674  | 257/332  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2004/08/06 16:07 |
| 12        | 6269 | 257/499 257/504 257/506 257/510 257/517<br>257/520 257/509 257/513 257/329 257/330<br>257/332  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2004/08/06 16:08 |
| 13        | 240  | (257/499 257/504 257/506 257/510 257/517<br>257/520 257/509 257/513 257/329 257/330<br>257/332) and epitax\$5 and (trench groove)<br>near6 (isolat\$3 insulat\$3) and (bipolar<br>bcd bipolar-cmos-dmos) and plan adj view | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2004/08/06 16:10 |
| -         | 9    | ("4416050") or ("5476809") or<br>("5597742")).PN.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2004/08/06 16:05 |

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| - | 3   | ((("4416050") or ("5476809") or ("5597742"))).PN.  | USPAT   | 2002/04/15 12:59 |
| - | 0   | jp-63-293938\$-\$\$.did.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/04/15 12:54 |
| - | 2   | jp-63293938\$-\$\$.did.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/04/15 12:54 |
| - | 0   | ep-0292972\$-\$\$.did.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/04/15 13:00 |
| - | 2   | ep-292972\$-\$\$.did.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/04/15 13:01 |
| - | 2   | ep-429131\$-\$\$.did.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/04/15 13:02 |
| - | 2   | ep-566186\$-\$\$.did.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/04/15 13:31 |
| - | 121 | (257/499).CCLS.  | USPAT;<br>US-PGPUB                                      | 2002/04/15 13:41 |
| - | 555 | (257/506).CCLS.  | USPAT;<br>US-PGPUB                                      | 2002/04/15 13:41 |
| - | 126 | (257/509).CCLS.  | USPAT;<br>US-PGPUB                                      | 2002/04/15 13:41 |
| - | 183 | (257/520).CCLS.  | USPAT;<br>US-PGPUB                                      | 2002/04/15 13:41 |
| - | 654 | ((((257/499).CCLS.) or ((257/506).CCLS.) or ((257/509).CCLS.) or ((257/510).CCLS.) or ((257/520).CCLS.)) and (trench or groove or sti or shallow adj trench adj isolation))  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/04/15 13:54 |
| - | 341 | ((((257/499).CCLS.) or ((257/506).CCLS.) or ((257/509).CCLS.) or ((257/510).CCLS.) or ((257/520).CCLS.)) and (trench or groove or sti or shallow adj trench adj isolation)) and surround\$3  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/04/15 14:03 |
| - | 66  | ((((257/499).CCLS.) or ((257/506).CCLS.) or ((257/509).CCLS.) or ((257/510).CCLS.) or ((257/520).CCLS.)) and (trench or groove or sti or shallow adj trench adj isolation)) and (surround\$3 near12 transistor)  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/05/31 18:59 |
| - | 1   | ((((257/499).CCLS.) or ((257/506).CCLS.) or ((257/509).CCLS.) or ((257/510).CCLS.) or ((257/520).CCLS.)) and (trench or groove or sti or shallow adj trench adj isolation)) and (surround\$3 near12 transistor)) and inductive adj load  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/04/15 14:06 |
| - | 1   | ((((257/499).CCLS.) or ((257/506).CCLS.) or ((257/509).CCLS.) or ((257/510).CCLS.) or ((257/520).CCLS.)) and (trench or groove or sti or shallow adj trench adj isolation)) and (surround\$3 near12 transistor)) and (power adj transistor near12 (inductive adj load or induction or inductor)) | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/04/15 14:07 |

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| - | 1    | (((((257/499).CCLS.) or ((257/506).CCLS.) or ((257/509).CCLS.) or ((257/510).CCLS.) or ((257/520).CCLS.)) and (trench or groove or sti or shallow adj trench adj isolation)) and (surround\$3 near12 transistor)) and (power adj transistor near12 (inductive adj load or induction or inductor or inductance)) | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/04/15 14:09 |
| - | 3    | (((((257/499).CCLS.) or ((257/506).CCLS.) or ((257/509).CCLS.) or ((257/510).CCLS.) or ((257/520).CCLS.)) and (trench or groove or sti or shallow adj trench adj isolation)) and (surround\$3 near12 transistor)) and (transistor near12 (inductive adj load or induction or inductor or inductance))           | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/04/15 14:09 |
| - | 337  | (257/510).CCLS.   | USPAT;<br>US-PGPUB                                      | 2002/04/15 14:44 |
| - | 0    | (257/510 and ((trench or groove) near12 (polysilicon or poly-si or polysilicon)) near12 dielectric).CCLS.   | USPAT;<br>US-PGPUB                                      | 2002/04/15 14:46 |
| - | 0    | (257/510 and ((trench or groove) near12 (polysilicon or poly-si or polysilicon)) near12 (dielectric or liner or lining)).CCLS.  | USPAT;<br>US-PGPUB                                      | 2002/04/15 14:46 |
| - | 1067 | ((trench or groove) near12 (polysilicon or poly-si or polysilicon)) near12 (dielectric or liner or lining)  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/04/15 14:47 |
| - | 689  | ((trench or groove) near6 (polysilicon or poly-si or polysilicon)) near6 (dielectric or liner or lining)  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/04/15 14:53 |
| - | 37   | ((trench or groove) near6 (polysilicon or poly-si or polysilicon)) near6 (dielectric or liner or lining) and device adj isolation   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/04/15 17:17 |
| - | 9    | ((trench or groove) near12 (device adj isolation)) same transistor) and ((polysilicon or poly-silicon or poly-si) near12 (trench or groove) near12 (lining or dielectric))  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/04/15 17:23 |
| - | 158  | ((trench or groove) near12 isolat\$3) near12 transistor) and ((polysilicon or poly-silicon or poly-si) near12 (trench or groove) near12 (lining or dielectric))   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/04/15 18:43 |
| - | 0    | "n<sb>+<sb>" adj "n<sb>-<sb>" same substrate same epitaxial same trench same polysilicon same dielectric  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/04/15 18:51 |
| - | 0    | "n.sub.+" adj "n.sub.-" same substrate same epitaxial same trench same polysilicon same dielectric  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/04/15 18:52 |
| - | 45   | erratico.in.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/04/15 18:53 |
| - | 0    | ("n+n-" or "p+p-") same substrate same epitaxial same (trench or groove)  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/04/15 18:54 |

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| - | 5    | ("n+n-" or "p+p-") and substrate and epitaxial and (trench or groove)  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2002/04/15 18:54 |
| - | 3    | ("n+n-" or "p+p-") and substrate and epitaxial and (trench or groove) and polysilicon and dielectric   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2002/04/15 18:58 |
| - | 5    | ("n+n-" or "p+p-") and substrate and epitaxial and (trench or groove)  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2002/04/15 19:09 |
| - | 5    | ("n+n-" or "p+p-") and epitaxial and (trench or groove)  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2002/04/15 19:10 |
| - | 48   | ("n+n-" or "p+p-") and (trench or groove)  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2002/04/15 19:10 |
| - | 2    | ("6184565").PN.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2002/04/16 09:22 |
| - | 1676 | epitaxial same substrate same (trench or groove) same isolat\$3  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2002/04/16 09:24 |
| - | 1173 | epitaxial same substrate same (trench or groove) same isolat\$3 and (257/\$6.ccls. or 438/\$6.ccls.)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2002/04/16 14:26 |
| - | 3    | ("5998822").PN.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2002/04/16 14:03 |
| - | 96   | epitaxial same substrate same (trench or groove) same isolat\$3 and (257/\$6.ccls. or 438/\$6.ccls.) and power adj2 (device or transistor)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2002/04/16 14:28 |
| - | 2    | ("5990537").PN.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2002/04/16 16:49 |
| - | 2    | ("6184565").PN.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2002/04/16 16:56 |
| - | 20   | (US-6184566-\$ or US-6204112-\$ or US-5909044-\$ or US-6239465-\$ or US-6133615-\$ or US-5998822-\$ or US-5990537-\$ or US-6184565-\$ or US-5597742-\$ or US-4416050-\$ or US-5476809-\$ or US-5757081-\$ or US-6335556-\$).did. or (US-20010050388-\$ or US-20010012655-\$).did. or (EP-292972-\$ or EP-429131-\$ or EP-566186-\$).did. or (US-5243214-\$ or JP-63293938-\$).did. | USPAT;<br>US-PGPUB;<br>EPO;<br>DERWENT                  | 2002/11/12 11:36 |

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| - | 12   | ((US-6184566-\$ or US-6204112-\$ or US-5909044-\$ or US-6239465-\$ or US-6133615-\$ or US-5998822-\$ or US-5990537-\$ or US-6184565-\$ or US-5597742-\$ or US-4416050-\$ or US-5476809-\$ or US-5757081-\$ or US-6335556-\$).did. or (US-20010050388-\$ or US-20010012655-\$).did. or (EP-292972-\$ or EP-429131-\$ or EP-566186-\$).did. or (US-5243214-\$ or JP-63293938-\$).did.) and (vertical or vmos or vmosfet or umos or umosfet) | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/11/12 08:39 |
| - | 3    | (trench or sti) near6 width near6 length near6 (die or chip)  | USPAT;<br>US-PGPUB;<br>EPO;<br>DERWENT                  | 2002/11/12 11:39 |
| - | 335  | (257/499).CCLS.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/11/12 11:40 |
| - | 880  | (257/506).CCLS.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/11/12 11:40 |
| - | 182  | (257/509).CCLS.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/11/12 11:40 |
| - | 251  | (257/520).CCLS.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/11/12 11:40 |
| - | 1581 | ((257/499).CCLS.) or ((257/506).CCLS.) or ((257/509).CCLS.) or ((257/520).CCLS.)  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/11/12 11:40 |
| - | 149  | ((257/499).CCLS.) or ((257/506).CCLS.) or ((257/509).CCLS.) or ((257/520).CCLS.)) and trench near12 (length or width)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/11/12 11:41 |
| - | 23   | (US-5476809-\$ or US-6184565-\$ or US-5909044-\$ or US-6204112-\$ or US-5986304-\$ or US-6288431-\$ or US-4661832-\$ or US-6184566-\$ or US-5757081-\$ or US-6335556-\$ or US-5990537-\$ or US-6239465-\$ or US-6133615-\$ or US-5998822-\$ or US-4416050-\$ or US-5597742-\$).did. or (US-20010050388-\$ or US-20010012655-\$).did. or (EP-566186-\$ or EP-429131-\$ or EP-292972-\$).did. or (JP-63293938-\$ or US-5243214-\$).did.     | USPAT;<br>US-PGPUB;<br>EPO;<br>DERWENT                  | 2003/02/12 10:40 |
| - | 105  | LATERAL ADJ TRENCH  | USPAT;<br>US-PGPUB;<br>EPO;<br>DERWENT                  | 2003/02/12 10:55 |
| - | 97   | lateral near6 (mos or mosfet or igfet or nmos or nmosfet or pmos or pmosfet or cmos or cmosfet or field adj effect or fet) and ((trench or groove) near12 gate near12 polysilicon)  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/02/12 11:23 |
| - | 1217 | ((257/329) or (257/330) or (257/332)).CCLS.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/02/12 11:24 |

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| - | 7    | ((257/329) or (257/330) or (257/332)).CCLS.) and trench near2 gate near12 separat\$3 near12 source near12 drain  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2004/05/31 11:35 |
| - | 0    | ((257/329) or (257/330) or (257/332)).CCLS.) and trench near2 gate near12 (polysilicon or polycrystalline adj silicon) near12 separat\$3 near12 source near12 drain  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/02/12 11:28 |
| - | 86   | ((257/329) or (257/330) or (257/332)).CCLS.) and trench near2 gate same (polysilicon or polycrystalline adj silicon) same source same drain  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/02/12 16:36 |
| - | 1    | "6020600".PN.  | USPAT   | 2003/02/12 16:13 |
| - | 1    | "5953602".PN.  | USPAT   | 2003/02/12 16:13 |
| - | 1    | "5883399".PN.  | USPAT   | 2003/02/12 16:14 |
| - | 1    | "5773343".PN.  | USPAT   | 2003/02/12 16:14 |
| - | 65   | ((257/329) or (257/330) or (257/332)).CCLS.) and trench near2 gate same (polysilicon or polycrystalline adj silicon) same source same drain and (epitaxial or epitaxy)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/02/12 16:59 |
| - | 4    | ((257/520) or (257/510) or (257/509) or (257/506) or (257/499)).CCLS.) and trench near2 gate same (polysilicon or polycrystalline adj silicon) same source same drain and (epitaxial or epitaxy)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/02/12 17:04 |
| - | 3    | ((257/520) or (257/510) or (257/509) or (257/506) or (257/499)).CCLS.) and trench near2 gate same (polysilicon or polycrystalline adj silicon) and (dmos or dmosfet).ti,ab. and (epitaxial or epitaxy)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/02/12 17:06 |
| - | 5    | ((257/520) or (257/510) or (257/509) or (257/506) or (257/499)).CCLS.) and trench and (polysilicon or polycrystalline adj silicon) and (dmos or dmosfet).ti,ab. and (epitaxial or epitaxy)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/02/12 17:07 |
| - | 93   | trench and (polysilicon or polycrystalline adj silicon) and (dmos or dmosfet).ti,ab. and (epitaxial or epitaxy)  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/02/12 17:55 |
| - | 2    | ("6124612").PN.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/02/12 18:32 |
| - | 452  | (257/329).CCLS.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/02/12 18:34 |
| - | 3201 | ((257/520) or (257/509) or (257/510) or (257/506) or (257/499) or (257/329) or (257/330) or (257/332)).CCLS.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/02/12 18:53 |
| - | 204  | ((257/520) or (257/509) or (257/510) or (257/506) or (257/499) or (257/329) or (257/330) or (257/332)).CCLS.) and (epitaxy or epitaxial or epitaxially) and (lateral or laterally) near12 (mos or dmos or nmos or pmos or cmos or mosfet or nmosfet or pmosfet or cmosfet or dmosfet or field adj effect or transistor) and (trench or groove) | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/02/12 18:57 |

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| - | 2    | ("6239465").PN.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/02/13 13:23 |
| - | 5846 | cdma.ti.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/02/13 13:23 |
| - | 3820 | cdma.ti. and system.ti.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/02/13 13:24 |
| - | 3820 | cdma.ti. and system.ti.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/02/13 13:25 |
| - | 435  | cdma.ti. and system.ti.   | USPAT   | 2003/02/13 13:25 |
| - | 2    | ("5914955").PN.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/02/13 13:40 |
| - | 0    | jfet adj isolation.ti. and 257/504.ccls.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/05/31 19:00 |
| - | 43   | 257/504.ccls.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/05/31 19:05 |
| - | 5    | jfet adj isolation  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/05/31 19:06 |
| - | 479  | (bi-cmos or bicmos) and device near2 isolation  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/05/31 19:08 |
| - | 77   | (bi-cmos or bicmos) and device near2 isolation and (latch-up latchup)                   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/05/31 19:59 |
| - | 0    | ("N.sub.+ N.sub.-" "P.sub.+ P.sub.-") and device near2 isolation and (latch-up latchup) | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/05/31 20:00 |
| - | 0    | ("N.sub.+N.sub.-" "P.sub.+P.sub.-") and device near2 isolation and (latch-up latchup)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/05/31 20:01 |
| - | 866  | 257/510   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/06/01 10:19 |
| - | 1    | "5316978".PN.   | USPAT   | 2003/05/31 20:16 |
| - | 1331 | shallow adj trench adj isolation.ti.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/05/31 20:52 |

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|---|----|---|---|------------------|
| - | 3  | polysilicon near6 (sit shallow adj isolation adj trench) and (shallow adj trench adj isolation.ti.) | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/05/31 20:49 |
| - | 2  | shallow adj trench adj isolation.ti. and polysilicon adj filling                                    | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/05/31 20:54 |
| - | 0  | deep adj trench adj isolation.ti. and polysilicon adj filling                                       | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/05/31 20:54 |
| - | 0  | deep adj trench adj isolation near20 polysilicon adj filling  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/05/31 20:54 |
| - | 14 | deep adj trench adj isolation and polysilicon adj filling   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/05/31 21:00 |
| - | 2  | ("6339241").PN.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/05/31 21:00 |
| - | 2  | ("5675173").PN.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/06/01 12:07 |
| - | 2  | deep adj trench adj isolation near3 bipolar.ti,ab,clm.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/06/01 12:09 |
| - | 5  | deep adj trench adj isolation near6 (mos mosfet nmos nmosfet pmos pmosfet bipolar).ti,ab,clm.       | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/06/01 12:10 |
| - | 90 | deep adj trench adj isolation.ti,ab,clm.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/06/01 13:45 |
| - | 8  | deep adj trench adj isolation and cmos and power.ti,ab,clm.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/06/01 13:47 |
| - | 0  | deep adj trench adj isolation near20 power adj transistor   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/06/01 13:48 |
| - | 12 | deep adj trench adj isolation and power adj transistor  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/06/01 13:48 |
| - | 0  | deep adj trench adj isolation and power adj transistor and cmos                                     | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/06/01 14:49 |

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| - | 300  | power adj (device transistor) near20 (cmos cmosfet)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/06/01 14:51 |
| - | 117  | power adj (device transistor) near3 (cmos cmosfet)  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/06/01 14:51 |
| - | 35   | power adj (device transistor) near3 (cmos cmosfet).ti,ab,clm.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/06/01 15:01 |
| - | 1    | power adj (device transistor) near3 (cmos cmosfet).ti,ab,clm. and (latch-up or latchup)                                   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2003/06/01 15:02 |
| - | 0    | (i intrinsic) adj (znse zinc adj selenide) near6 conductivity adj type  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2004/08/04 16:34 |
| - | 151  | photodiode.ti. and conductivity adj type.clm.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2004/05/05 14:43 |
| - | 54   | "4631803"   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2004/05/31 10:54 |
| - | 2    | ("4631803").PN.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2004/08/04 16:34 |
| - | 2    | ("5736445").PN.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2004/05/31 11:04 |
| - | 6    | ((("4416050") or ("5476809") or ("5597742"))).PN.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2004/05/31 11:36 |
| - | 1    | ((("4416050") or ("5476809") or ("5597742"))).PN.) and surround\$3  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2004/05/31 11:36 |
| - | 2306 | ((257/499).CCLS.) or ((257/506).CCLS.) or ((257/509).CCLS.) or ((257/510).CCLS.) or ((257/520).CCLS.)                     | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2004/06/03 11:55 |
| - | 219  | (guard adj ring guard-ring) and plan adj view and (dmos dmosfet bipolar adj transistor)                                   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2004/08/04 16:35 |
| - | 203  | (guard adj ring guard-ring) and plan adj view and (dmos dmosfet bipolar adj transistor) and (power signal adj processing) | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM TDB | 2004/08/04 19:23 |

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| - | 10   | ((("3500139") or ("4051506") or ("4261003") or ("4546370") or ("4725561") or ("4851078") or ("4860081") or ("4879584") or ("4897362") or ("4900689"))).PN.  | USPAT;<br>IBM_TDB                                       | 2004/08/04 16:49 |
| - | 176  | (guard adj ring guard-ring) and plan adj view and (dmos dmosfet bipolar adj transistor) and (power signal adj processing) and (257/\$9.ccls. 438/\$9.ccls.)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2004/08/04 16:57 |
| - | 203  | (guard adj ring guard-ring) and plan adj view and (dmos dmosfet bipolar adj transistor) and (power signal adj process\$3)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2004/08/04 19:23 |
| - | 1171 | (guard adj ring guard-ring trench groove) and plan adj view and (dmos dmosfet bipolar adj transistor) and (power signal adj process\$3)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2004/08/04 19:24 |
| - | 1053 | (guard adj ring guard-ring trench groove) and plan adj view and (dmos dmosfet bipolar adj transistor) and (power signal adj process\$3) and (257/\$9.ccls. 438/\$9.ccls.)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2004/08/04 19:25 |
| - | 1053 | (guard adj ring guard-ring trench groove) and plan adj view and (dmos dmosfet bipolar adj transistor) and (power signal adj process\$3) and (257/\$9.ccls. 438/\$9.ccls.)   | USPAT;<br>US-PGPUB                                      | 2004/08/04 19:26 |
| - | 502  | (guard adj ring guard-ring isolation near3 (trench groove)) and plan adj view and (dmos dmosfet bipolar adj transistor) and (power signal adj process\$3) and (257/\$9.ccls. 438/\$9.ccls.)   | USPAT;<br>US-PGPUB                                      | 2004/08/04 19:32 |
| - | 320  | (guard adj ring guard-ring isolation near3 (trench groove)) and plan adj view and (dmos dmosfet bipolar adj transistor) and epitax\$3 and (power signal adj process\$3) and (257/\$9.ccls. 438/\$9.ccls.)   | USPAT;<br>US-PGPUB                                      | 2004/08/04 19:34 |
| - | 0    | (guard adj ring guard-ring isolation near3 (trench groove)) and plan adj view and (dmos dmosfet bipolar adj transistor) and epitax\$3 and (power signal adj process\$3) and (257/\$9.ccls. 438/\$9.ccls.) and ("N.sub.+ N.sub.-" "P.sub.+ P.sub.-")                 | USPAT;<br>US-PGPUB                                      | 2004/08/04 19:35 |
| - | 0    | (guard adj ring guard-ring isolation near3 (trench groove)) and plan adj view and (dmos dmosfet bipolar adj transistor) and epitax\$3 and (power signal adj process\$3) and (257/\$9.ccls. 438/\$9.ccls.) and ("N.sub.+" near2 "N.sub.-" "P.sub.+" near3 "P.sub.-") | USPAT;<br>US-PGPUB                                      | 2004/08/04 19:37 |
| - | 4    | 899573.ap.  | USPAT;<br>US-PGPUB                                      | 2004/08/04 19:36 |
| - | 1    | (guard adj ring guard-ring isolation near3 (trench groove)) and plan adj view and (dmos dmosfet bipolar adj transistor) and epitax\$3 and (power signal adj process\$3) and (257/\$9.ccls. 438/\$9.ccls.) and ("N+N-" "P+P-")                                       | USPAT;<br>US-PGPUB                                      | 2004/08/04 19:41 |
| - | 0    | ((guard adj ring guard-ring) near6 polysilicon) (isolation near3 (trench groove)) and plan adj view and (dmos dmosfet bipolar adj transistor) and epitax\$3 and (power signal adj process\$3) and (257/\$9.ccls. 438/\$9.ccls.) and ("N+N-" "P+P-")                 | USPAT;<br>US-PGPUB                                      | 2004/08/04 19:42 |

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| - | 0   | ((guard adj ring guard-ring) near8 polysilicon) (polysilicon near8 (isolation near3 (trench groove))) and plan adj view and (dmos dmosfet bipolar adj transistor) and epitax\$3 and (power signal adj process\$3) and (257/\$9.ccls. 438/\$9.ccls.) and ("N+N-" "P+P-") | USPAT;<br>US-PGPUB | 2004/08/04 19:43 |
| - | 1   | ((guard adj ring guard-ring) near8 polysilicon) (polysilicon near8 (trench groove))) and plan adj view and (dmos dmosfet bipolar adj transistor) and epitax\$3 and (power signal adj process\$3) and (257/\$9.ccls. 438/\$9.ccls.) and ("N+N-" "P+P-")                  | USPAT;<br>US-PGPUB | 2004/08/04 19:45 |
| - | 168 | ((guard adj ring guard-ring) near8 polysilicon) (polysilicon near8 (trench groove))) and plan adj view and (dmos dmosfet bipolar adj transistor) and epitax\$3 and (power signal adj process\$3) and (257/\$9.ccls. 438/\$9.ccls.)                                      | USPAT;<br>US-PGPUB | 2004/08/04 19:56 |
| - | 37  | ((guard adj ring guard-ring) near8 polysilicon) (polysilicon near8 (trench groove)) near8 isolat\$3) and plan adj view and (dmos dmosfet bipolar adj transistor) and epitax\$3 and (power signal adj process\$3) and (257/\$9.ccls. 438/\$9.ccls.)                      | USPAT;<br>US-PGPUB | 2004/08/04 19:57 |

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|---|-----|--|---|------------------|
| - | 133 | (US-6724043-\$ or US-6657242-\$ or<br>US-6429502-\$ or US-6355537-\$ or<br>US-6156622-\$ or US-6121102-\$ or<br>US-6064106-\$ or US-5648283-\$ or<br>US-5434447-\$ or US-5453640-\$ or<br>US-5376822-\$ or US-5736445-\$ or<br>US-6472709-\$ or US-5567634-\$ or<br>US-4914058-\$ or US-4767722-\$ or<br>US-4893160-\$ or US-5856701-\$ or<br>US-6566223-\$ or US-6439514-\$ or<br>US-6320233-\$ or US-6028344-\$ or<br>US-6011297-\$ or US-5767578-\$ or<br>US-5525824-\$ or US-4951102-\$).did. or<br>(US-4835585-\$ or US-5773343-\$ or<br>US-5814858-\$ or US-5689128-\$ or<br>US-5298780-\$ or US-5034785-\$ or<br>US-5818084-\$ or US-5319235-\$ or<br>US-5583348-\$ or US-5644157-\$ or<br>US-5770884-\$ or US-6184566-\$ or<br>US-6335556-\$ or US-5675173-\$ or<br>US-5920108-\$ or US-5668397-\$ or<br>US-5909044-\$ or US-6204112-\$ or<br>US-4631803-\$ or US-4916513-\$ or<br>US-4922318-\$ or US-5059550-\$ or<br>US-5159429-\$ or US-5221857-\$ or<br>US-6133615-\$ or US-6239465-\$ or<br>US-6184565-\$).did. or (US-5581110-\$ or<br>US-5757081-\$ or US-5861330-\$ or<br>US-5882966-\$ or US-5990537-\$ or<br>US-5998822-\$ or US-4416050-\$ or<br>US-5476809-\$ or US-5597742-\$ or<br>US-6060731-\$ or US-6188104-\$ or<br>US-6200841-\$ or US-6225659-\$ or<br>US-6239464-\$ or US-6307231-\$ or<br>US-6337499-\$ or US-6373098-\$ or<br>US-6432775-\$ or US-6437390-\$ or<br>US-6445037-\$ or US-6452230-\$ or<br>US-6518127-\$ or US-5696010-\$ or<br>US-5895951-\$ or US-5945708-\$ or<br>US-6284604-\$ or US-6373097-\$).did. or<br>(US-6118149-\$ or US-5986304-\$ or<br>US-6288431-\$ or US-6396090-\$ or<br>US-4661832-\$ or US-4933739-\$ or<br>US-5969378-\$ or US-5917216-\$).did. or<br>(US-20030203576-\$ or US-20030122154-\$ or<br>US-20020085434-\$ or US-20040094819-\$ or<br>US-20040097082-\$ or US-20040140503-\$ or<br>US-20040089941-\$ or US-20040089942-\$ or<br>US-20040089940-\$ or US-20040089925-\$ or<br>US-20040070072-\$ or US-20040070060-\$ or<br>US-20030227061-\$ or US-20030222304-\$ or<br>US-20030207538-\$ or US-20030025164-\$ or<br>US-20020179996-\$ or US-20020171118-\$ or<br>US-20020014678-\$ or US-20010012655-\$ or<br>US-20010050388-\$ or US-20010023961-\$ or<br>US-20020121662-\$ or US-20020153557-\$ or<br>US-20020158287-\$ or US-20030001199-\$).did.<br>or (US-20020074585-\$ or US-20020179967-\$<br>or US-20020195653-\$ or US-20020038887-\$ or<br>US-20030001202-\$ or US-20020100951-\$).did.<br>or (EP-566186-\$ or EP-429131-\$ or<br>EP-292972-\$ or EP-1193765-\$).did. or<br>(JP-62065477-\$).did. or (JP-06334030-\$ or<br>EP-509183-\$ or US-4416050-\$ or<br>US-5665619-\$ or US-5243214-\$ or<br>JP-63293938-\$ or US-20020038887-\$).did. or<br>(NA85035501).tban. | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2004/08/04 20:49 |
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| - | 9 | ((US-6724043-\$ or US-6657242-\$ or<br>US-6429502-\$ or US-6355537-\$ or<br>US-6156622-\$ or US-6121102-\$ or<br>US-6064106-\$ or US-5648283-\$ or<br>US-5434447-\$ or US-5453640-\$ or<br>US-5376822-\$ or US-5736445-\$ or<br>US-6472709-\$ or US-5567634-\$ or<br>US-4914058-\$ or US-4767722-\$ or<br>US-4893160-\$ or US-5856701-\$ or<br>US-6566223-\$ or US-6439514-\$ or<br>US-6320233-\$ or US-6028344-\$ or<br>US-6011297-\$ or US-5767578-\$ or<br>US-5525824-\$ or US-4951102-\$).did. or<br>(US-4835585-\$ or US-5773343-\$ or<br>US-5814858-\$ or US-5689128-\$ or<br>US-5298780-\$ or US-5034785-\$ or<br>US-5818084-\$ or US-5319235-\$ or<br>US-5583348-\$ or US-5644157-\$ or<br>US-5770884-\$ or US-6184566-\$ or<br>US-6335556-\$ or US-5675173-\$ or<br>US-5920108-\$ or US-5668397-\$ or<br>US-5909044-\$ or US-6204112-\$ or<br>US-4631803-\$ or US-4916513-\$ or<br>US-4922318-\$ or US-5059550-\$ or<br>US-5159429-\$ or US-5221857-\$ or<br>US-6133615-\$ or US-6239465-\$ or<br>US-6184565-\$).did. or (US-5581110-\$ or<br>US-5757081-\$ or US-5861330-\$ or<br>US-5882966-\$ or US-5990537-\$ or<br>US-5998822-\$ or US-4416050-\$ or<br>US-5476809-\$ or US-5597742-\$ or<br>US-6060731-\$ or US-6188104-\$ or<br>US-6200841-\$ or US-6225659-\$ or<br>US-6239464-\$ or US-6307231-\$ or<br>US-6337499-\$ or US-6373098-\$ or<br>US-6432775-\$ or US-6437390-\$ or<br>US-6445037-\$ or US-6452230-\$ or<br>US-6518127-\$ or US-5696010-\$ or<br>US-5895951-\$ or US-5945708-\$ or<br>US-6284604-\$ or US-6373097-\$).did. or<br>(US-6118149-\$ or US-5986304-\$ or<br>US-6288431-\$ or US-6396090-\$ or<br>US-4661832-\$ or US-4933739-\$ or<br>US-5969378-\$ or US-5917216-\$).did. or<br>(US-20030203576-\$ or US-20030122154-\$ or<br>US-20020085434-\$ or US-20040094819-\$ or<br>US-20040097082-\$ or US-20040140503-\$ or<br>US-20040089941-\$ or US-20040089942-\$ or<br>US-20040089940-\$ or US-20040089925-\$ or<br>US-20040070072-\$ or US-20040070060-\$ or<br>US-20030227061-\$ or US-20030222304-\$ or<br>US-20030207538-\$ or US-20030025164-\$ or<br>US-20020179996-\$ or US-20020171118-\$ or<br>US-20020014678-\$ or US-20010012655-\$ or<br>US-20010050388-\$ or US-20010023961-\$ or<br>US-20020121662-\$ or US-20020153557-\$ or<br>US-20020158287-\$ or US-20030001199-\$).did.<br>or (US-20020074585-\$ or US-20020179967-\$<br>or US-20020195653-\$ or US-20020038887-\$ or<br>US-20030001202-\$ or US-20020100951-\$).did.<br>or (EP-566186-\$ or EP-429131-\$ or<br>EP-292972-\$ or EP-1193765-\$).did. or<br>(JP-62065477-\$).did. or (JP-06334030-\$ or<br>EP-509183-\$ or US-4416050-\$ or<br>US-5665619-\$ or US-5243214-\$ or<br>JP-63293938-\$ or US-20020038887-\$).did. or<br>(NA85035501).tban.) and (dmos dmosfet) and<br>bipolar adj transistor and ((trench near8<br>isolat\$3) guard adj ring) and (epitaxial<br>epitaxially epitaxy) | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2004/08/04 20:51 |
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